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TECHNOLOGY CENTER/ART UNIT 3732

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of: :  
Croop et al. :  
Serial No.: 10/677,195 : Group Art Unit: 3732  
Filed: 10-02-03 : Examiner: Todd E. Manahan  
For: SELF CLEANING DENTAL MIRROR :

**AMENDMENT**

Commissioner of Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Please see the following for amendments to the above referenced application.

**In the Specification:**

1. Replace paragraph beginning page 11, line 16 and ending page 12 line 9 with the following:

The present invention is a self-cleaning dental mirror comprising an elongated handle and a reflective surface affixed to one end of the handle. Means for communicating air and water through the handle to air and water orifices which direct air and water at the reflective surface are provided. An air valve means and a water valve means are positioned within the handle and control air flow to the air orifices and water flow to the water orifices. In a significant feature of the present invention, the self-cleaning dental mirror and all of its components are constructed from materials that

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are autoclavable, capable of withstanding sterilization through high temperature and high pressure. In the most preferred embodiment of the invention, the handle and all other metal parts are constructed from anodized aluminum, while the O rings providing seals around pipe connections are formed from ~~Viton~~ VITON™.

2. Replace paragraph beginning page 18, line 10 and ending page 19 line 15 with the following:

The head section 28 fits into the valve body section 30 with a male extension 29 from the head section 28 being received in a female cavity 31 formed in the valve body section 30, as shown in Figures 3 and 7. Within the male extension 29 there are an air pipe female extension 33 and a water pipe female extension 35, as shown in Figure 7. When the head section 28 and valve body section 30 are properly assembled, the air pipe female extension 33 engages an air pipe male extension 37, and the water pipe female extension 35 engages a water pipe male extension 39, as shown in Figure 7. The male extension 29 and female cavity 31 are keyed to that they only fit together if the air pipe female extension 33 and water pipe female extension 35 line up with the air pipe male extension 37 and water pipe male extension 39. To insure that the pipe connections are air tight and water tight, the air pipe male extension 37 has double O-rings 37A, 37B, and the water pipe male extension 39 has double O-rings 39A, 39B as shown in Figure 7. In order that the self cleaning dental mirror 10 of the present invention be autoclavable, it is contemplated that the O-rings be constructed of ~~VITON~~ VITON™, although other flexible materials having sealing capabilities that would withstand high temperature, high pressure sterilization may be used without departing from the principles of the present invention. The inclusion of a male extension 29 and

female cavity 31 between the head section 28 and valve body section 30 provides a means for quickly disconnecting both ends of the valve body section 30, allowing only that portion of the dental mirror to be repaired or replaced. This is a significant feature of the present invention because it allows a user to easily replace a portion of the dental mirror 10 without having to send it out for repair or replacement.

3. Replace paragraph beginning page 27, line 5 and ending page 27 line 13 with the following:

As with any dental instrument, the mirror 10 of the present invention must be autoclavable, that is, it must be able to withstand sterilization through application of high heat and high pressure. To conform to such requirements, the mirror 10 is constructed wholly from non-corroding, non-pressure sensitive, non-heat sensitive materials. In the most preferred embodiment, the handle 16 and all metal parts are constructed from anodized aluminum. The O rings that provide air and water tight seals around the valves and hose connections are made of ~~VITON~~ VITON™.